

## A NEW GENUS OF ALPINE LICHENS

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### USNEACEÆ

**Bibbya** J. H. Willis;

genus novum austro-alpinum a *Dactylina* Nyl. proximum differt sporis acicularibus multiseptatis (sporæ *Dactylinae* unicellulares globosæ vel ellipsoideæ).

*Thallus* fruticosus, aliquanto radiatus, sparse et irregulariter ramosus [in specie unica usque ad 15 mm. altus, glaber, infra ochraceus, supra ambusto-brunnescens nitens, pulvinos madreporiformes vel sub-cerebriformes usque ad 10 cm. in latitudine formans, inter muscos alpinos—præcipue *Andreaea* species—secus rupes crescens]. *Rami* late teres, cavernosi, dactyliformes, sursum insigniter et irregulariter inflati, conferti; apices perobtus (sub-orbiculati), sparse pertusi. *Cortex* crassus (50-150 mic.), hyphis ad superficiem perpendicularis gelifactus. *Medulla* alba, ex hyphis laxè intertextis et irregulariter ramosis (quisque 2-4 mic. diam.) consistens, centrum excavatum relinquens. *Apothecia* terminalia, discoidea lecanoroidea, rotunda vel distorta [in specie unica usque ad 4 mm. lata, subnigra, hypothecio late brunneo], amphithecio manifeste formato sed parathecio subnullo. *Asci* clavato-cylindrici, usque ad 70 mic. longi, apice obtusi obnubilantes. *Ascospore* multiseptatæ, hyalinae, obtuse virgiformes [in specie unica 35-40 × 3 mic.].

Hospes algensis protococcoides.

GENOTYPUS: **B. muelleri** (F. R. M. Wilson) combinatio nova—species unica.

[*Siphula muelleri* F. R. M. Wilson in *Vict. Nat.* 6: 179 (Apr. 1890)].

SITUS: Victoria—Mt. Hotham, inter muscos ad rupes subalpinas alt. 6000' (F. R. M. Wilson, 17 Jan. 1890—HOLOTYPUS infertilis in MEL); Bogong High Plains, "in cracks of granitic rocks at heads of Middle Creek", circ. 5500' (H. T. Clifford, 26 Jan. 1948—MEL); Mt. Stirling, "on granite boulders of eastern scarp", circ. 5600' (J. H. Willis, 8 Mar. 1953—MEL).

### COMBINED GENERIC-SPECIFIC DESCRIPTION

**BIBBYA MUELLERI** (F. R. M. Wilson) J. H. Willis

*Thallus* fruticose, to 15 mm. high, sparingly and irregularly branched, somewhat radiate, smooth and polished, ochraceous beneath, shiny and becoming scorched brown above, forming stone-coral-like or rather brain-like cushions (to 10 cm. in extent) which grow amongst and upon alpine mosses—chiefly *Andreaea* species—on rock surfaces. *Branches* broadly terete, hollow, finger-like, curiously and irregularly inflated upwards, densely compacted; apices very obtuse and rounded, bearing a few large pits. *Cortex* thick (0.05-0.15 mm.), gelified, with hyphae perpendicular to the surface. *Medulla* white, of rather loosely interwoven and irregularly branched hyphae (2-4 mic. diameter), leaving the centre hollow; K—, C—. *Apothecia* terminal, discoid and lecanorine, round or variously distorted, up to 4 mm. wide, almost black, with bright brownish hypothecium; amphithecium well-developed, but prac-

## PLATE VII



-Photo.: H. T. Reeves

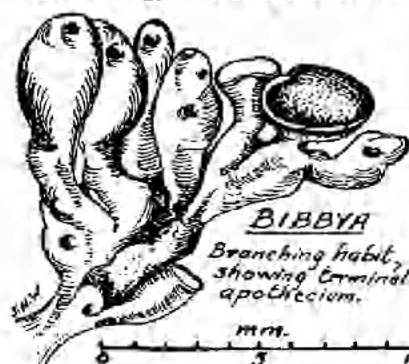
*Bibby muelleri* (F. R. M. Wilson) J. H. Willis

(Parts of three fertile colonies: lower from Mt. Stirling, in plan and elevation; upper from Bogong High Plains, the white patches indicating interiors of hollow branches eaten off by some animal)

ically no parathecium. *Asci* clavate cylindric, to 0.07 mm. long, darker toward the rounded apex. *Ascospores* multiseptate, hyaline, rod shaped, with bluntish extremities,  $35-40 \times 3$  mic. *Algal host* protococcoid.

#### DISCUSSION

After the deaths of Rev. F. R. M. Wilson in 1903 and R. A. Bastow in 1920, there was no one in Victoria with a good working knowledge of the lichen flora. About 1940 the late P. Bibby took up the study of these fascinating, if neglected, plants, and in the course of a few years he became the only lichen authority and informant of Australia, corresponding regularly with experts in Europe and America. His untimely death last year was a sad blow to lichenology. One of his most intriguing problems was the true



nature of a rare alpine species which Rev. Wilson had found on Mt. Hotham in January 1890; the specimen was barren, but three months later Wilson described it as *Siphula muelleri*. No other collections came to light for 58 years; then, while Bibby and H. T. Clifford were botanizing together on the Bogong High Plains (Jan. 1948), the latter botanist was fortunate enough to rediscover

*Siphula muelleri*—in quantity and in fruit! The present writer also located material with fruiting bodies on granitic boulders at Mt. Stirling, March 1953. On March 19, 1953, Bibby sent specimens to the world authority on Antarctic lichens, Dr. Carrol W. Dodge of Missouri, who announced (1/6/1953) that a new genus of *U'sneaceae* was involved; he pointed out the differences from other genera in this family and suggested that Bibby go ahead with its formal description. Unfortunately, publication had not been made up to the time of Bibby's death, and I do not even know what he intended to call it. With Dr. Dodge's approval, I now bestow on it the surname of my late friend and colleague—as a permanent, fitting tribute to one who did so much toward the elucidation of Australian lichens and hepatics.

*Bibbya* is most closely related to the boreal *Dactylina* Nyl. which displays a similar madreporiform, hollowed thallus with lecanorine apothecia, but the latter has much smaller, unicellular, spherical to ellipsoid spores. *Endocena informis* Cronb. of Patagonia also has a dwarf, fruticose, radiate and somewhat hollowed thallus, but the surface is chalky and fruiting body unknown. *Siphula*, the genus under which Wilson described *B. muelleri*, is not known in the fruiting condition and all species have a solid thallus.

On the type sheet of *B. muelleri* in Melbourne Herbarium someone had pencilled "*Dufourea madreporiformis*?", and this collection had been placed in the *Dufourea* folder. *D. madreporiformis* (Wulf.) Ach. occurs on the alps of Europe and North America, and is really referable to *Dactylina madreporiformis* Tuck. (1866), differing from *Bibbys* in its much thinner branches and unicellular ellipsoid spores ( $7-10 \times 3-4$  mic.). The new genus is almost certainly of Antarctic origin and its occurrence might be anticipated in Tasmania, New Zealand and Fuegia.

## NATIONAL PARKS ACT

By J. R. GARRET

On October 25, 1956, the National Parks Bill was passed by the Victorian Parliament. With its passage has ended a phase of the long campaign commenced many years ago by the Field Naturalists' Club of Victoria and continued unremittingly by the Club and associated organizations—a campaign for a better deal for our national parks, for the conservation of nature and natural resources.

We use the term "phase" advisedly because an Act of Parliament, of itself, can only provide the machinery for establishing our nature conservation areas on a satisfactory basis. The real job remains yet as a task for the future, and naturalists throughout the State will assuredly be called upon to help make the new Act a workable instrument. By reason of their acquaintance with the natural history of the State, its geology and physiography, the ecological associations of its flora and fauna, its scenic places and those of peculiar scientific interest, naturalists can contribute a fund of knowledge which should be of inestimable value to those who are to be appointed to carry out the provisions of the Act.

The debates in Parliament on the Bill tended to confirm an opinion already held by some naturalists, that the F.N.C.V. has been far too modest about the remarkable contribution it has made to the cause of nature conservation. Perhaps many of the present-day members of the Club, as well as parliamentarians, are unaware that Victoria owes to the F.N.C.V. the very existence of the majority of our national parks. The long struggle to have Wilson's Promontory reserved is recorded in early volumes of the *Victorian Naturalist*, but the journal has given little prominence to the representations by naturalists and the subsequent negotiations which led to the proclamation of Wyperfeld, Lakes, Lind, Alfred, Wingan Inlet and Mallacoota Inlet as well as numerous other important nature reserves.

Despite the growth of population and the steady development of economically utilizable natural resources, there still remain areas which should be brought within the ambit of the National Parks Act. All naturalists should be alert to see that such areas are not overlooked when the Authority commences a task which it surely will undertake at an early date—a survey of the State to determine where new national parks should be established.

The Act is recognized as an experimental measure, and it remains to be seen how effective its administration will be. Much will depend on the amount of money the Government will be prepared to set aside for the work (there is no statutory appropriation!) and on the calibre of the individuals chosen to serve on the National Parks Authority. The Act contains only fifteen clauses but the provisions are such that its administration should prove to be reasonably flexible. Some of the clauses warrant comment so that members of the Club will be able to appreciate the problems which will confront the new Authority.